

ABSTRACT

A microporous polyolefin film which comprises 5 to 95 wt.% polyethylene (A) having a viscosity-average molecular weight (M_v) of 2,000,000 or higher, a first-melting-peak signal height as determined by DSC (differential scanning calorimetry) of 3.0 mW/mg or higher, a specific surface area of 0.7 m²/g or larger, and an average particle diameter of 1 to 150 μ m and 95 to 5 wt.% polyethylene (B) having an M_w of 10,000 to 200,000, excluding 10,000 and 200,000, wherein the ratio of the M_v of the compound (A) to that of the compound (B), (A)/(B), is 10 or higher, the film as a whole has a molecular weight of 300,000 to 1,500,000, and the film has a fuse temperature of 120 to 140°C, a breaking temperature of 150°C or higher, and a ratio of the piercing strength at 25°C to the piercing strength at 140°C of from 0.01 to 0.25.